

Mn-Ni-Sn based full Heusler alloys for low temperature giant exchange bias applications

The present invention relates to an intermetallic alloy series having a large exchange bias effect, comprising the formula $Mn_{50}Ni_{42-\delta}Sn_{8+\delta}$ ($\delta = 0, -0.25$ and ± 0.5) wherein δ represents an atomic percentage content. The present invention further relates to a process for the preparation of intermetallic alloy series having a large exchange bias effect, comprising the formula $Mn_{50}Ni_{42-\delta}Sn_{8+\delta}$ ($\delta = 0, -0.25$ and ± 0.5) by arc melt technology.

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